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## **Private Equity, Leverage, and Distress Resolution: Governance, Investment Behavior, and Long-Run Value in Leveraged Buyouts**

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### **ABSTRACT**

This paper examines the multifaceted relationships among private equity ownership, leverage, operational transformation, and the resolution of financial distress in leveraged buyouts (LBOs). Drawing on foundational theoretical contributions and an extensive empirical literature, the article integrates governance theories of agency and monitoring with evidence on operating performance, investment patterns, bankruptcy processes, and post-distress restructuring under private equity stewardship (Jensen, 1989; Kaplan, 1989; Kaplan, 1991; Kaplan & Strömberg, 2009). Building from productivity and ownership-change studies and contemporary analyses of distress resolution, the paper synthesizes perspectives that explain when private equity sponsors create value and when they raise the risk of distress or fire-sale outcomes (Lichtenberg & Siegel, 1987; Hotchkiss, Stromberg & Smith, 2021; LoPucki & Doherty, 2002; LoPucki & Doherty, 2007). The contribution is a richly elaborated theoretical narrative that connects sponsor incentives, debt design (including payment-in-kind instruments), and legal-institutional environments to firm-level outcomes, while evaluating conflicting empirical findings concerning innovation, long-run investment, and systemic implications for stakeholders including employees, creditors, and consumers (Lerner, Sorensen & Strömberg, forthcoming; Morgenson & Rizzo, 2018; Tykvova & Borell, 2012). The paper also integrates recent sectoral and health-care-related evidence on private equity ownership effects on operational outcomes and quality measures (Borsa et al., 2023) and incorporates new research on PIK amendments and capital-structure outcomes in sponsor-backed LBOs (Shounik, 2025). The discussion emphasizes mechanistic explanations, counterarguments, and boundary conditions that reconcile heterogeneous results in the literature and proposes a research agenda to clarify causal pathways linking private equity control, leverage dynamics, and long-run firm value.

### **KEYWORDS**

**private equity; leveraged buyouts; financial distress; governance; bankruptcy; PIK financing; restructuring**

### **INTRODUCTION**

Private equity (PE) has been a defining force in corporate restructuring and ownership transformation since the late twentieth century, with leveraged buyouts representing a paradigmatic organizational change in which control, incentives, and capital structure are reconfigured to pursue value creation (Jensen, 1989; Kaplan, 1989). The theoretical underpinnings of the PE model emphasize concentrated ownership and active monitoring as mechanisms that mitigate agency costs and align managerial incentives with value-maximizing strategies (Jensen, 1989; Kaplan & Strömberg, 2009). Empirical work has generally found improvements in operating performance following buyouts (Kaplan, 1989; Kaplan, 1991), but a broader literature complicates the narrative by documenting heterogeneous outcomes, including increased risk-taking, restructuring that may harm

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stakeholders, and variable effects on long-run investment and innovation (Lichtenberg & Siegel, 1987; Lerner, Sorensen & Strömberg, forthcoming; Tykvova & Borell, 2012).

This paper takes as its organizing problem the dual tension in private equity: how and when concentrated equity control combined with substantial leverage creates sustainable value rather than merely transferring wealth among stakeholders or precipitating distress. The tension is consequential because LBOs often rely on high leverage that both disciplines managers and elevates default risk; when distress occurs, the governance capabilities of private equity sponsors may either facilitate superior restructuring outcomes or contribute to fire-sales and inefficient resolution (Hotchkiss, Stromberg & Smith, 2021; LoPucki & Doherty, 2007). Contemporary debates intensify the stakes: critics point to cases such as Toys 'R' Us to argue that financial engineering and heavy debt burdens can accelerate corporate decline (Morgenson & Rizzo, 2018), while proponents argue that PE-generated governance and operational improvements foster long-term value and productive investment (Kaplan & Strömberg, 2009; Lerner, Sorensen & Strömberg, forthcoming).

Beyond this normative debate, empirical ambiguities persist. Some studies document meaningful productivity gains following changes in ownership and managerial incentives (Lichtenberg & Siegel, 1987), while recent systematic reviews and sectoral analyses highlight concerning impacts—particularly in healthcare—on outcomes and costs (Borsa et al., 2023). The literature on bankruptcy and distress resolution adds further complexity; institutional factors, venue selection, and the structuring of debt alter whether reorganizations lead to recovery or value-destroying fire sales (LoPucki & Kalin, 2001; LoPucki & Doherty, 2002). Furthermore, new forms of financing and covenant amendments, such as PIK (payment-in-kind) toggles and runway-extending amendments, have emerged as salient features of sponsor-backed capital structures in the 2010s and early 2020s, with contested implications for firm risk and long-run outcomes (Shounik, 2025).

This article integrates these strands into a comprehensive theoretical and descriptive synthesis intended for academic readers and policy-interested practitioners. It sets out a granular mechanistic account of the causal chains connecting sponsor incentives, incentive contracts, debt design, and the legal-institutional environment to firm-level operational decisions and distress outcomes. It examines competing hypotheses, explores boundary conditions, and highlights empirical patterns that reconcile apparently contradictory results across contexts. By synthesizing classical contributions and recent empirical developments, this paper aims to clarify the circumstances under which PE ownership enhances durable value and when it may precipitate adverse outcomes, while outlining a research agenda that leverages recent methodological advances and novel data sources.

## **METHODOLOGY**

This paper is a synthetic, theory-driven review that constructs an integrative argument based exclusively on the reference set provided. The method privileges careful textual synthesis, logical integration of theoretical propositions, and close alignment with empirical findings reported in the cited literature. The approach is descriptive and interpretive rather than computational: rather than reanalyzing raw data, the paper reconstructs causal narratives and counterfactuals by connecting empirical regularities and theoretical principles from the reference list.

The methodological sequence comprises three interlocking activities. First, the literature is organized thematically to create conceptual modules: governance and agency reduction; operating performance and productivity following ownership change; investment behavior under buyout ownership; debt design and financing instruments (including PIK); bankruptcy venues, processes, and fire-sale risk; and sectoral outcomes including healthcare and retail. Each module distills core mechanisms from the primary references (Jensen,

1989; Kaplan, 1989; Lichtenberg & Siegel, 1987; LoPucki & Doherty, 2002), and identifies the principal empirical patterns associated with the mechanism.

Second, within each module, competing hypotheses are articulated and tested against the reported empirical evidence. For example, the governance module contrasts the "discipline and monitoring" hypothesis—with concentrated ownership and oversight generating efficiency gains (Jensen, 1989; Kaplan & Strömberg, 2009)—against the "short-termism" critique, which posits that private equity pushes for near-term cost cuts at the expense of long-run investment and innovation (Tykvova & Borell, 2012; Morgenson & Rizzo, 2018). Each competing hypothesis is evaluated using findings from the provided references, and theoretical implications are drawn.

Third, the paper synthesizes across modules to produce an integrative causal framework. This framework highlights interactions—how, for instance, debt design modulates the ability of sponsors to implement operational changes, or how legal-institutional differences shape bankruptcy outcomes and the incidence of fire sales (LoPucki & Kalin, 2001; LoPucki & Doherty, 2007). The method emphasizes explicit acknowledgement of limits and heterogeneity: differences in industry, time period, sponsor heterogeneity, and debt instrument composition cause variation in observed outcomes (Ljungqvist, Richardson & Wolfenzon, 2007; Lerner, Sorensen & Strömberg, forthcoming).

Throughout the synthesis, every major claim is traced to specific references. The article deliberately refrains from introducing external sources beyond the provided reference list, ensuring strict adherence to the user's instruction that the article be based strictly on the supplied references. Consequently, the methodology focuses on interpretive depth—explaining mechanisms and counterarguments at length—rather than on introducing novel empirical estimates.

## RESULTS

The organization of results mirrors the thematic modules of the methodology and presents the synthesized findings from the literature.

### **Governance, Agency, and Value Creation**

A central insight advanced by Jensen (1989) is that the public corporation, with dispersed ownership and weak managerial discipline, suffers chronic agency costs that can be mitigated by concentrated ownership and active control. Leveraged buyouts operate by concentrating equity stakes in sponsor hands and by embedding incentives—equity shares, compensation linked to exit outcomes, and intensified monitoring—that align management with value creation goals (Jensen, 1989; Kaplan & Strömberg, 2009). Kaplan's empirical work documents improvements in operating performance following LBOs, including cash flow enhancements and profitability gains, supporting the hypothesis that concentrated ownership and active governance can unleash latent value (Kaplan, 1989; Kaplan, 1991).

However, the governance story is not unambiguous. While concentrated ownership can reduce managerial slack and promote efficiency, it also changes the distribution of control rights in ways that can reallocate surplus across stakeholders—equity, debt, employees, suppliers, and consumers. The literature documents instances where private equity-sponsored reorganizations involve aggressive cost-cutting, divestitures, and headcount reductions; in some contexts these changes appear to raise productivity and competitiveness (Lichtenberg & Siegel, 1987), but in others they fuel criticism about social costs and long-term investment neglect (Morgenson & Rizzo, 2018; Borsa et al., 2023). This heterogeneity suggests that sponsor governance leads to value creation when operational fixes address real inefficiencies or competence gaps, but may generate value transfers or

erosion if cost reductions undermine core capabilities or market positioning (Kaplan & Strömberg, 2009; Hotchkiss, Stromberg & Smith, 2021).

### **Operating Performance and Productivity**

Lichtenberg and Siegel's (1987) analysis of plant-level productivity changes after ownership changes provides a foundational datapoint: new ownership regimes that bring managerial attention and reallocation of resources can materially affect productivity. Kaplan (1989, 1991) provides firm-level evidence that LBOs generally register improved operating metrics in the years following the buyout, including profitability and cash-flow indicators (Kaplan, 1989; Kaplan, 1991). These results are consistent with the governance hypothesis and underscore the role of active oversight in executing operational restructuring and strategic refocusing.

Yet the improvement narrative coexists with evidence of heterogeneous investment trajectories. Ljungqvist, Richardson and Wolfenzon (2007) analyze the investment behavior of buyout funds to show systematic variation in how sponsors allocate capital post-acquisition, with some sponsors emphasizing cost efficiency and short-term cash generation while others pursue growth investments. Lerner, Sorensen and Strömberg (forthcoming) emphasize that private equity's impact on long-run investment and innovation is context-dependent; in some industries and time periods, PE ownership supports innovation through resources and managerial focus, while in others it may crowd out R&D by prioritizing immediate returns.

### **Investment Behavior, R&D, and Innovation**

A recurrent policy concern is whether private equity ownership inhibits long-run investment and innovation. Lerner, Sorensen and Strömberg (forthcoming) undertake a broad evaluation of private equity and long-run investment, documenting mixed evidence: while some PE-backed firms increase capital expenditure and innovation metrics post-acquisition, others reduce R&D intensity. The mechanisms at work include sponsor horizon, compensation structures, and the alignment (or misalignment) between leverage-induced cash-flow pressure and the time horizons necessary for R&D payoffs (Lerner, Sorensen & Strömberg, forthcoming). Tykvova and Borell (2012) highlight empirical cases in which private equity owners increase financial risk and in some instances contribute to bankruptcy probability, which can curtail long-term investment programs.

The literature thus identifies critical moderating factors: sponsor type and experience, industry knowledge, the nature of technological investment, and the availability of debt structures that permit flexible investment during downturns (Kaplan & Strömberg, 2009; Ljungqvist, Richardson & Wolfenzon, 2007). Where sponsors bring specialized operational capabilities and patient capital, R&D can be preserved or even enhanced; where sponsors prioritize near-term cash extraction and accelerated deleveraging, longer-horizon projects may be curtailed (Lerner, Sorensen & Strömberg, forthcoming).

### **Debt Design, PIK Instruments, and Capital Structure Outcomes**

Debt design lies at the heart of LBO dynamics. High leverage serves a disciplining role by imposing cash-flow constraints that force managerial efficiency (Jensen, 1989), but it also increases the sensitivity of firms to negative shocks and constrains investment flexibility. A particularly salient innovation in leveraged finance has been the use of payment-in-kind (PIK) instruments and amendment provisions that extend runway but alter the cash-flow and risk profile of the firm. Shounik (2025) examines PIK amendments and their capital-structure outcomes across U.S. sponsor-backed LBOs (2020–2025), employing difference-in-differences to evaluate whether runway-extension amendments preserve value or defer distress at the cost of future capital-structure fragility (Shounik, 2025). The study finds evidence consistent with dual effects: PIK amendments can temporarily prevent covenant breaches and stave off immediate distress, but they may also increase the

eventual burden of debt servicing and raise the likelihood of later capital-structure renegotiation (Shounik, 2025). This pattern resonates with broader concerns about the incidence of "extend-and-pretend" strategies in financial distress resolution and the tradeoff between short-term survival and long-term solvency (McConnell & Servaes, 1991).

### **Bankruptcy, Venue, and the Risk of Fire Sales**

When leverage culminates in bankruptcy, the institutional setting and the priority of claims play decisive roles in recovery values and employment outcomes. LoPucki and colleagues provide an influential line of work documenting pathologies in bankruptcy practice, particularly in Delaware and New York, where concerns about "races to the bottom" and the failure of public company reorganizations have been raised (LoPucki & Kalin, 2001; LoPucki & Doherty, 2002). Their evidence indicates that certain venue practices and legal incentives can yield suboptimal reorganizations and increase the propensity for fire sales—rapid asset disposals at depressed prices that destroy long-run value (LoPucki & Doherty, 2007).

Hotchkiss, Stromberg and Smith (2021) synthesize the role of private equity in distress resolution, arguing that PE sponsors often leverage their governance expertise to restructure distressed firms; yet outcomes depend on debt composition, creditor coordination, and the capacity to implement operational turnarounds (Hotchkiss, Stromberg & Smith, 2021). McConnell and Servaes (1991) add nuance by documenting the economics of prepackaged bankruptcies, where negotiated restructuring pre-filing can expedite resolution and preserve going-concern value—but such outcomes demand creditor cooperation and realistic valuation adjustments.

### **Sectoral and Health Outcomes**

Sector-specific evidence complicates universal claims about PE effects. The BMJ systematic review by Borsa et al. (2023) evaluates private equity ownership trends and impacts on health outcomes, costs, and quality, noting heterogeneous effects across geographies and healthcare subsegments. The review raises concerns that certain PE strategies—particularly cost-focused models—may adversely affect quality of care or raise costs in the medium term (Borsa et al., 2023). These findings echo broader worries that PE-driven restructurings can have social externalities that go beyond shareholder returns (Morgenson & Rizzo, 2018).

In retail industries, case studies like Toys 'R' Us have been emblematic of how leverage and governance choices can interrelate with market shifts to produce bankruptcy despite operational scale (Morgenson & Rizzo, 2018). Such cases underscore the importance of industry dynamics and external shocks (e.g., competitive pressure from e-commerce) in conditioning the success or failure of LBO strategies.

### **Synthesis: When Does PE Create Durable Value?**

The literature collectively indicates that PE creates durable value when three conditions co-occur: (1) sponsors possess credible operational expertise and industry knowledge that enable genuine efficiency and strategic reconfiguration; (2) debt structures provide sufficient flexibility for necessary investment and for absorbing shocks without forcing premature asset disposals; and (3) the legal-institutional environment and creditor coordination allow for orderly restructuring if distress occurs (Kaplan & Strömberg, 2009; Ljungqvist, Richardson & Wolfenzon, 2007; LoPucki & Doherty, 2002). When these conditions are absent—when sponsors lack operational skill, when debt instruments are overly rigid or predatory, or when bankruptcy venues incentivize rapid asset liquidation—private equity ownership may increase the probability of distress and lead to value-destroying outcomes (LoPucki & Kalin, 2001; Tykvova & Borell, 2012; Morgenson & Rizzo, 2018).

## **DISCUSSION**

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This section offers extended interpretation, theoretical extension, counter-arguments, and identification of unresolved questions.

#### Elaborating Mechanisms: Incentives, Control, and Resource Reallocation

The theoretical core of PE value creation rests on incentive and control mechanisms first articulated in the corporate governance literature (Jensen, 1989). Concentrated ownership solves information and agency problems by coupling managerial rewards to exit outcomes through equity stakes and by enabling active oversight that can rapidly reallocate resources away from underperforming lines to higher-return activities (Jensen, 1989; Kaplan & Strömberg, 2009). This reallocation can be particularly potent in organizations suffering from managerial inertia or perverse incentive compensation structures that decouple managerial rewards from firm performance.

However, the same mechanisms can cause negative externalities. Equity concentration permits majority owners to extract rents, restructure contracts, or pursue asset sales that benefit equity holders at the expense of creditors or employees. The tradeoffs are inherently distributional: governance that enhances operational efficiency benefits owners when intrinsic firm value rises; but when efficiency gains are achieved predominantly through cost-cutting that erodes productive capacity or reduces future innovation potential, then the longer-run net effect on social welfare may be ambiguous (Lichtenberg & Siegel, 1987; Lerner, Sorensen & Strömberg, forthcoming).

#### Debt Design as a Double-Edged Sword

Leverage amplifies returns but also risk. The literature highlights two critical features of debt design that determine outcomes. First is the maturity and amortization schedule—front-loaded amortization increases near-term cash demands and constrains investment; long-dated instruments or PIK toggles ease early cash demands but convert to larger obligations later, potentially creating cliff risks (Shounik, 2025). Second is the covenant architecture: covenants can serve as early-warning devices and governance tools that compel management to maintain operational discipline, yet overly rigid covenants can trigger technical defaults during transient downturns and force fire sales (McConnell & Servaes, 1991; LoPucki & Doherty, 2007).

Shounik's (2025) findings on PIK amendments capture this duality. PIK amendments that convert cash interest into accrued principal payments can extend runway, allowing sponsors to execute turnaround plans. But they also inflate future principal, potentially reducing recovery rates for creditors and compressing future investment capacity. The empirical signal is that PIK amendments are useful tactical devices but carry strategic risk if used repeatedly or without realistic plans for deleveraging (Shounik, 2025).

#### Bankruptcy Venues, Creditor Coalitions, and Fire-Sale Risk

LoPucki's critical work on bankruptcy practice reveals how legal-institutional settings mediate outcomes. Venue shopping, debtor-in-possession financing, and the discretion exercised by courts and professionals can influence whether reorganizations protect going-concern value or devolve into asset sales that capture short-term liquidity but destroy long-term value (LoPucki & Kalin, 2001; LoPucki & Doherty, 2002). The presence of sponsor equity and the interests of hedge funds or distressed investors further complicate creditor coalitions during bankruptcy, with implications for settlement terms and the preservation of operations (Hotchkiss, Stromberg & Smith, 2021).

Prepackaged bankruptcies, where reorganization plans are largely negotiated ex ante, can mitigate these hazards by aligning creditor incentives and reducing time-in-bankruptcy (McConnell & Servaes, 1991). Yet prepackaged solutions require credible valuation agreements and a degree of creditor coordination that may be

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infeasible in highly complex capital stacks.

### **Sectoral Vulnerabilities and Societal Costs**

Sector-level heterogeneity tempers universal policy prescriptions. In healthcare, for instance, Borsa et al. (2023) find mixed evidence about PE ownership effects on quality and costs; in high-regulation industries or those with strong reputation externalities, aggressive cost-squeezing may translate into reputational damage or regulatory pushback (Borsa et al., 2023). The retail case of Toys 'R' Us underscores how structural market shifts (digital competition) interacted with highly leveraged capital structures to accelerate insolvency, producing broad social costs (Morgenson & Rizzo, 2018). Thus policy debates about private equity must be attentive to industry characteristics and the social externalities of restructuring.

### **Reconciling Divergent Empirical Findings**

Apparent contradictions in the literature—improvements in operating performance documented by Kaplan (1989, 1991) versus concerns about increased bankruptcy risk and asset stripping (Tykvoňa & Borell, 2012; LoPucki & Doherty, 2007)—can be reconciled by recognizing heterogeneity across sponsors, industries, and debt structures. Sponsors differ in operational competence and horizon preferences; buyouts vary in leverage and covenant design; industries vary in the returns to organizational restructuring versus the returns to long-horizon investment (Ljungqvist, Richardson & Wolfenzon, 2007; Lerner, Sorensen & Strömberg, forthcoming). Consequently, the average effect reported in a pooled sample may mask important variations that determine ultimate outcomes.

### **Limitations of the Evidence Base and Methodological Challenges**

A recurring limitation across the literature is selection bias: firms chosen for buyouts are not randomly selected; sponsors often target underperforming but fundamentally salvageable firms or, conversely, firms with hidden potential for improvement (Kaplan, 1989; Ljungqvist, Richardson & Wolfenzon, 2007). Without strong identification strategies, attributing causal effects to PE ownership remains challenging. The diversity of empirical approaches—event studies, difference-in-differences, plant-level analyses—yields complementary insights but also complicates direct comparability (Lichtenberg & Siegel, 1987; Shounik, 2025).

The study of bankruptcy outcomes faces additional obstacles: confidential restructuring terms and heterogeneous legal environments complicate measurement of recovery values and post-reorganization performance (LoPucki & Kalin, 2001; LoPucki & Doherty, 2007). Furthermore, the rapid evolution of financing instruments (e.g., PIK toggles, unitranche loans) and the rise of non-bank capital providers alter the capital structure landscape in ways that require updated data and methodologies (Shounik, 2025; Kaplan & Strömberg, 2009).

### **Policy Implications and Regulatory Considerations**

The synthesis suggests calibrated regulatory responses. First, disclosure improvements about debt terms and amendment practices (e.g., PIK clauses) would enhance market discipline and enable stakeholders to better assess risk (Shounik, 2025). Second, bankruptcy venue reforms and enhanced creditor coordination mechanisms could reduce the incidence of value-destroying fire sales and improve recovery outcomes (LoPucki & Kalin, 2001; LoPucki & Doherty, 2002). Third, sector-sensitive oversight—particularly in healthcare—might be warranted to safeguard quality and societal outcomes when PE ownership concentrates power over essential services (Borsa et al., 2023).

### **Future Research Directions**

Several promising avenues exist. First, more rigorous causal studies that exploit exogenous variation in sponsor entry—such as instrumenting for sponsor selection or using natural experiments—would refine causal inference about PE-induced operational changes. Second, richer datasets that detail debt contract provisions, amendment histories, and sponsor heterogeneity would clarify how specific financing choices shape outcomes (Shounik, 2025). Third, interdisciplinary research that blends legal analysis of bankruptcy practice with firm-level performance studies could illuminate how institutional features interact with sponsor incentives (LoPucki & Doherty, 2007; Hotchkiss, Stromberg & Smith, 2021). Finally, sectoral micro-studies, particularly in healthcare and education, can unpack social externalities and welfare tradeoffs of PE ownership (Borsa et al., 2023).

## CONCLUSION

The evidence synthesized here portrays private equity as a potent but ambiguous force in corporate governance and restructuring. Concentrated ownership and active monitoring can unlock latent value by correcting agency frictions, improving operations, and refocusing strategic priorities (Jensen, 1989; Kaplan, 1989; Kaplan & Strömberg, 2009). Yet the leveraging that often accompanies PE transactions amplifies risk, constrains investment, and—depending on contract design and institutional context—can precipitate distress or fire sales that destroy value (LoPucki & Doherty, 2007; Tykvova & Borell, 2012; Shounik, 2025).

The balance between value creation and value destruction hinges on sponsor capability, debt architecture (including PIK provisions), creditor coordination, and legal-institutional environments. Policy responses should therefore be surgical: improving disclosure, refining bankruptcy institutions to prioritize going-concern value, and tailoring oversight in sectors where social externalities are large. For researchers, the agenda calls for better causal identification, richer contract-level data, and interdisciplinary studies that connect governance, finance, and law.

Collectively, the literature suggests that private equity is neither a panacea nor an unambiguous source of harm. Instead, its impact is conditionally positive where governance competence, flexible capital structures, and institutional arrangements align to support sustainable operational improvements; it is potentially destructive where leverage, poor contract design, or perverse institutional incentives favor short-term extraction over durable value creation (Kaplan & Strömberg, 2009; Hotchkiss, Stromberg & Smith, 2021; Shounik, 2025). Clarifying these conditions remains an urgent task for scholars and policymakers, given private equity's central role in contemporary corporate restructuring and the broad societal implications of its strategies.

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